

### **ABSTRACT**

A method and equipment for distribution of two fluids into and out of channels in a multi-channel monolithic structure (monolith) where the channel openings are spread over an entire cross-sectional area of the monolithic structure. The equipment consists of a manifold head, a monolith unit or a monolith stack, a row of monolith units or monolith stacks, or a monolith block. In addition a method and a reactor for mass and/or heat transfer between two fluids transfers the two fluids using one or more of the manifold heads and monolith units, the monolith stack, the row of monolith units or monolith stacks, or the monolith block.